

Indian Standard IS 11006:2011 - Your Guide to Safe Flash Back Arrestor

Flash Back Arrestor is a device to stop or arrest or prevent the return of the flame which can result in an explosion or of the blow back of the oxygenated gas from damaging whatever it is intended to protect. There devices are commonly used in delivery pipe lines, acetylene generators, gas, petroleum, oil and gasoline or liquefied petroleum storage and or piping system and welding and cutting systems.

The type of applications of Flash Back Arrestors make it a very critical product. Indian Standard IS 11006, developed by the Bureau of Indian Standards (BIS), outlines the safety and performance requirements for Flash Back Arrestors.

The material of the device is resistant to corrosion or chemical reaction under condition of use. The gaskets is made of compressed asbestos fiber or metal spiral wound type or synthetic rubber which is compatible with the process gas. The casing is able withstand the internal hydraulic pressure which is equal to ten times its maximum working pressure or 60 bars whichever is higher. The sealing medium used is such that it does not react with the gas with which it is intended to be used and is safe for use under the operation condition. Flash Back Arrestors undergo Non-return Valve Test to Ensures gas cannot flow backward, Temperature-Sensitive Valve to ensure that The cut-off valve shall automatically cut-off the gas flow before the upstream gas is ignited similarly Pressure-Sensitive e Cut-off Valve test to check that the device is actuated by a pressure less than or equal to 1 200 mbar. Flame Arrestor Test is performed to ensure they quench flashbacks and prevent flame travel upstream, also the Gas Flow Measurement is carried out to ensure that the device allows the correct amount of gas flow at the required pressures.

When distributed, the safety device is accompanied by instructions which contain valuable information such as Function of the safety device, Operational and performance data (maximum working pressure, gas flow characteristics, Permissible types of gas, an explanation of the abbreviations marked on the device, Instruction for installation of equipment, Procedures to be carried out prior to operation, Procedure for safe operation, Instruction in case of malfunctioning and Recommendation for inspection, testing and maintenance. The Flash Back Arrestors are also marked with crucial information such as Manufacturer's name or trade-mark, Serial number, Direction of nominal flow, Name of gas or its abbreviation, Maximum operating pressure in bars and Safety functions.

In summary, IS 11006 is your assurance that the Flash Back Arrestors you buy are safe, durable, and of high quality. Next time you purchase Flash Back Arrestors, look for the BIS mark to ensure they meet these standards, giving you peace of mind for your safety.